

CLAIMS

1. A non-aqueous electrolyte for a cell comprising at least one aprotic organic solvent and a support salt, which further includes a compound containing phosphorus and/or nitrogen in its molecule and
5 having a difference of a boiling point from that of the respective aprotic organic solvent of not more than 25°C.

2. A non-aqueous electrolyte for a cell according to claim 1, wherein the compound containing phosphorus and/or nitrogen in its molecule has a phosphorus-nitrogen double bond.

10 3. A non-aqueous electrolyte for a cell according to claim 2, wherein the compound containing phosphorus and/or nitrogen in its molecule is a phosphazene compound.

4. A non-aqueous electrolyte for a cell according to claim 1, wherein the aprotic organic solvent is at least one selected from the
15 group consisting of ethylene carbonate, propylene carbonate, diethyl carbonate, dimethyl carbonate, ethyl methyl carbonate and methyl formate.

5. A non-aqueous electrolyte for a cell according to claim 1, wherein the aprotic organic solvent is at least one selected from the
20 group consisting of propylene carbonate, 1,2-dimethoxy ethane and γ -butyrolactone.

6. A non-aqueous electrolyte cell comprising a non-aqueous electrolyte as claimed in any one of claims 1-5, a positive electrode and a negative electrode.

25 7. An electrolyte for a polymer cell comprising at least one aprotic organic solvent, a polymer and a support salt, which further includes a compound containing phosphorus and/or nitrogen in its molecule and having a difference of a boiling point from that of the respective aprotic organic solvent of not more than 25°C.

30 8. An electrolyte for a polymer cell according to claim 7, wherein the compound containing phosphorus and/or nitrogen in its molecule has a phosphorus-nitrogen double bond.

9. An electrolyte for a polymer cell according to claim 8,

wherein the compound containing phosphorus and/or nitrogen in its molecule is a phosphazene compound.

10. An electrolyte for a polymer cell according to claim 7,
wherein the aprotic organic solvent is at least one selected from the
5 group consisting of ethylene carbonate, propylene carbonate, diethyl
carbonate, dimethyl carbonate, ethyl methyl carbonate and methyl
formate.

11. A polymer cell comprising an electrolyte as claimed
in any one of claims 7-10, a positive electrode and a negative
10 electrode.